

ABSTRACT OF THE DISCLOSURE

The invention discloses a photolithographic patterning method of a photoresist layer for the formation of a patterned resist layer on a substrate surface having a fine hole pattern. The inventive method comprises the steps of forming a patterned resist layer by using a specific chemical-amplification positive-working photoresist composition compounded with a di- or polyvinyloxy compound such as cyclohexanedimethanol divinyl ether as a crosslinking agent of the resinous ingredient and subjecting the patterned resist layer on the substrate to a heat treatment for the so-called thermal flow treatment to effect pattern size reduction of the resist pattern.

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